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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,154	03/25/2004	Ban Kuan Koay	70030659-1	8362

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AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P. O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
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PINHEIRO, JASON PAUL

ART UNIT	PAPER NUMBER
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3714

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/810,154

Applicant(s)

KOAY ET AL.

Examiner

Jason Pinheiro

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/05/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. After the amendment filed on 03/05/2007, Claims 1, and 3 were amended. As a result claims 1-9 are pending.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Drake (7046229).

Regarding claim 1: Drake '229 discloses a game controller comprising: a moveable element (Col. 6, Lines 20-33) (Fig. 3) having an optically readable pattern on a surface thereof (Col. 11, Lines 14-24), said moveable element moving relative to a fixed position and having a position characterized by a relative position of said moveable element relative to said fixed position (Col. 7, Line 11 – Col. 8, Line 3); an imaging element that forms an image of a sub-area on said surface, said sub-area being determined by said relative position of said moveable element relative to said fixed position (Col. 11, Lines 14-42); a memory for storing a map that specifies said readable pattern in each sub-area on said

surface that can be imaged by said imaging element (Col. 6, Line 21 – Col. 7, Line 3)(Fig. 3); and a controller for comparing said image to said map to determine said position of said moveable element (Col. 11, Lines 14-42).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake (US 7046229) in view of Chen et al (US 2003/0020690).

Drake discloses that which is discussed above. However Drake does not disclose that said pattern comprises a plurality of randomly distributed spots.

Chen '690 does disclose that said pattern comprises a plurality of randomly distributed spots (Paragraph [0023])(Fig. 9).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to integrate the teachings of Chen into the teachings of Drake in order to create a more accurate game controller.

6. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake (US 7046229) in view of Liebenow (US 6078312).

Drake discloses that which is discussed above. However Drake does not disclose that said controller generates a signal indicative of a position of said

movable element in terms of first and second orthogonal displacements from a reference position.

Liebenow '312 does disclose that said controller generates a signal indicative of a position of said movable element in terms of first and second orthogonal displacements from a reference position (Col. 5, Line 11 – Col. 6, Line 37);

Therefore it would have been obvious to one skilled in the art at the time the invention was made to integrate the teachings of Liebenow into the teachings of Drake in order to create a more accurate and user enjoyable game controller.

7. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drake (US 7046229) as applied to claim 1 above, in view of Liebenow (US 6078312) and further in view of Rosenberg (US 2005/0009605).

Regarding claim 4: Drake and Liebenow disclose that which is discussed above. However neither Drake nor Liebenow disclose that said controller generates a signal indicative of a rotation of said moveable element about a predetermined axis on said moveable element.

Rosenberg '605 does disclose that said controller generates a signal indicative of a rotation of said moveable element about a predetermined axis on said moveable element (Paragraph [0027])(Fig. 2).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to integrate the teachings of Liebenow into the teachings of Drake in order to create a more accurate and user enjoyable game controller.

Regarding claim 5: Drake, Liebenow, and Rosenberg disclose that which is discussed above. Liebenow further discloses that said moveable element comprises a handle (Fig. 5).

Regarding claim 6: Drake, Liebenow, and Rosenberg disclose that which is discussed above. Liebenow further discloses that said handle comprises a shaft with a shaft axis parallel to said predetermined axis (Fig. 5).

Regarding claim 7: Drake, Liebenow, and Rosenberg disclose that which is discussed above. Although Drake does not specifically disclose a push button having a state that is sensed by said controller, it is well known in the art that joysticks often include additional buttons to provide additional inputs for the user, in order to make a more versatile game device for a player to use.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake (US 7046229) in view of Rosenberg (US 2005/0009605).

Regarding claim 8: Drake discloses that which is discussed above. However Drake does not disclose that said map comprises a plurality of sub-maps that are rotated relative to one another.

Rosenberg does disclose that said map comprises a plurality of sub-maps that are rotated relative to one another (Paragraph [0027]).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to integrate the teachings of Rosenberg into the teachings of Drake in order to create a more accurate game controller.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake (US 7046229).

Regarding claim 9: Drake discloses that which is discussed above. Drake further discloses that a plurality of search processors, each search processor comparing a portion of said map with said image formed by said imaging element (Col. 11, Lines 14-60). Although Drake does not specifically disclose a plurality of search processors, it is well known in the computer art to use multiple processors to conduct a specific task to increase the speed of completing the computing task.

### ***Response to Arguments***

10. Applicant's arguments, see pages 4-9, filed 03/05/2007, with respect to the rejection(s) of claim(s) 1-9 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of different interpretation of the previously applied reference, and previously cited references.

11. Applicant's arguments, see page 4, filed 03/05/2007, with respect to objection of claims 1, and 3 have been fully considered and are persuasive. The objections of claims 1, and 3 have been withdrawn.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Pinheiro whose telephone number is 571-270-1350. The examiner can normally be reached on M - F 8:00 AM - 4 PM;.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP  
05/31/2007

  
**KIM NGUYEN**  
**PRIMARY EXAMINER**